

Science – Year 5/6 – Autumn (2)
Earth and Space



Prior Learning	
<p>This unit is the only Astronomy related science unit in the primary science curriculum. The aim is to give children a basic overview of Earth and its place in our Solar System. Prior learning will be children’s own knowledge of the solar system through the reading of books etc.</p>	
Key vocabulary for this unit	
<p>Sun Star Moon Planet Sphere Spherical bodies Satellite</p>	
Learning Sequence	
Spherical Bodies	<ul style="list-style-type: none">• Describing the Sun, Earth and Moon as approximately spherical bodies by understanding how this knowledge has been attained.• I can explain why we know the Sun, Earth and Moon are spherical.• Identifying scientific evidence that has been used to support or refute ideas or arguments in the context of how ideas changed from a flat earth view.• I can identify scientific evidence which does or does not provide evidence for an idea or argument.

The Planets	<ul style="list-style-type: none"> • Describing the movement of the Earth, and other planets, relative to the Sun in the solar system by learning the order of the planets and how they move in the solar system. • I can name and describe features of the planets in our solar system. • I can order the planets in our solar system.
Geocentric vs Heliocentric	<ul style="list-style-type: none"> • Describing the movement of the Earth, and other planets, relative to the Sun in the solar system by examining the geocentric and heliocentric theories. • I can explain how planets move in our solar system. • Identifying scientific evidence that has been used to support or refute ideas or arguments in the context of the shift from heliocentric models of the solar system to geocentric models. • I can identify scientific evidence which does or does not provide evidence for an idea or argument.
Night & Day	<ul style="list-style-type: none"> • Using the idea of the Earth's rotation to explain day and night and the apparent movement of the Sun across the sky by examining why the sun appears to move and the arguments for the Earth's rotation. • I can explain day and night and the apparent movement of the sun across the sky. • Identifying scientific evidence that has been used to support or refute ideas or arguments in the context of the evidence for the Earth's rotation. • I can identify scientific evidence which does or does not provide evidence for an idea or argument.
Night & Day International	<ul style="list-style-type: none"> • Using the idea of the Earth's rotation to explain day and night and the apparent movement of the Sun across the sky by predicting night and day in different places on Earth. • I can investigate night and day in different parts of the Earth. • Reporting and presenting findings from enquiries, including conclusions, in oral and written forms such as displays and other presentations in the context of investigating night and day. • I can report and present findings from enquiries.
Movement of the Moon	<ul style="list-style-type: none"> • Describing the movement of the Moon relative to the Earth by explaining how the Moon orbits the Earth. • I can explain the movement of the Moon.

Mission to the Moon	<ul style="list-style-type: none"> To describe how scientific ideas have changed over time in the context of Margaret Hamilton's development of software for the Apollo moon missions
Assessment milestones	
<p>Working Scientifically:</p> <ul style="list-style-type: none"> Make predictions about night and day in different places on Earth. Report and present findings from enquiries with support. Explain that the Moon orbits the Earth not the Sun 	<p>Scientific Knowledge:</p> <ul style="list-style-type: none"> Describe a sphere. Identify scientific evidence with support. Name the planets in the solar system with support. Explain how the planets orbit the Sun. Explain how night and day occur.